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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,193	11/05/2001	Minoru Yaguchi	08846-084001	8706

7590 12/03/2002
Fish & Richardson
45 Rockefeller Plaza Suite 2800
New York, NY 10111

EXAMINER

SZEKELY, PETER A

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 12/03/2002

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/889,193

Applicant(s)

YAGUCHI ET AL.

Examiner

Peter Szekely

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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DETAILED ACTION

Election/Restrictions

1. The restriction requirement imposed in Paper #6 is withdrawn by the examiner.

Specification

2. The disclosure is objected to because of the following: If "M" has to be a metal, ammonium or an organic amine, how can (B) be an organic acid?

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-9 and 11-17 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Since the specification specifies that (B) can be an organic acid, "M" has to be able to be "H" too. Claims 11-17 cannot comprise a cement additive only. The presence of cement is essential to a high strength concrete mix.

5. Claims 4 and 5 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. There are five different average molecular weights, i.e.

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weight, number, viscosity, peak and Z average molecular weights. They are wildly divergent for the same polymer, especially when the molecular weight is above 10,000. One of ordinary skill in the art would not know which monomers and polymers are included in applicants' invention.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-9 and 11-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. The indefinite word "type" renders the claims indefinite. The claims are also rendered indefinite by the word "derivative". Carbon dioxide is a derivative of polyalkylene glycols. It is derived by burning. The phrase "may be" is also renders the claims indefinite.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-9 and 11-17 are rejected under 35 U.S.C. 102(b or e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Yamashita et al. 6,294,015, Yamato et al. 6,239,241, Tanaka et al. 6,187,841, Hirata et al. 6,147,980,

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Hirata et al. 6,166,112, Kono et al. 6,165,262, Yamashita et al. 6,087,418, Hirata et al. 5,925,184, Yamato et al. 5,707,445, Nippon Shokubai Co., LTD. EP 0 792 850 or Denki Kakagu Kogyo KK 1996JP-0336720.

11. Yamashita et al. ('015) disclose monomers in claims 1, 4, 7, 10, 13 and 16, monomer ratios in claims 2, 3, 5, 6, 8, 9, 11, 12 and 14-17. Molecular weights are shown in column 11, lines 34-47. For ratios of ingredients, see column 15, lines 54-67 and column 16, lines 1-16. Yamato et al. ('241) teach copolymers in claim 1, monomer ratios in claim 5, molecular weights in claim 6 and concentrations in the Examples. Tanaka et al. recite monomers, molecular weights and monomer ratios in claims 1, 2 and 7-10, while concentrations can be found in column 11, lines 44-67. Hirata et al. ('980) divulge monomers and molecular weights in claims 1-10, monomer ratios in column 8, lines 24-39 and dispersant concentrations in column 8, lines 54-67. Hirata et al. ('112) reveal monomers and their ratios in claims 1-14, molecular weights in column 8, lines 33-36, concentrations in column 9, lines 47-55. Kono et al. display monomers, monomer ratios polymer concentrations and cement in claims 1-6, copolymerizable monomers in the paragraph overlapping columns 3 and 4 and molecular weights in column 7, lines 6-30. Yamashita et al. ('418) present monomers and their ratios in claims 1-18, concentrations in column 19, lines 14-34 and molecular weights in column 14, lines 53-64. Hirata et al. ('184) describe monomers, their ratios and polymer concentrations in the claims and molecular weights in column 11, lines 19-30. Hirata et al. ('284) discuss monomers, monomer ratios and molecular weights in claims 1-11 and polymer concentrations in Tables 2 and 3. Yamato et al. ('445) list monomers monomer

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ratios, polymer concentrations and molecular weights in claims 1-8. Nippon Shokubai seems to be identical to Hirata et al. ('184). Denki shows cement and monomers in the Abstract. Applicants' claims are not novel. In the alternative, since the cited references exhibit all combinations of monomers, monomer ratios, molecular weights and polymer concentrations, any combination of the above variables would have been obvious to one having ordinary skill in the art, at the time the invention was made.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Szekely whose telephone number is 703-308-2460. The examiner can normally be reached on Tuesday-Friday 7:00 a.m.-5:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Peter Szekely
Primary Examiner
Art Unit 1714

P.S.
November 26, 2002